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MEMORANDUM

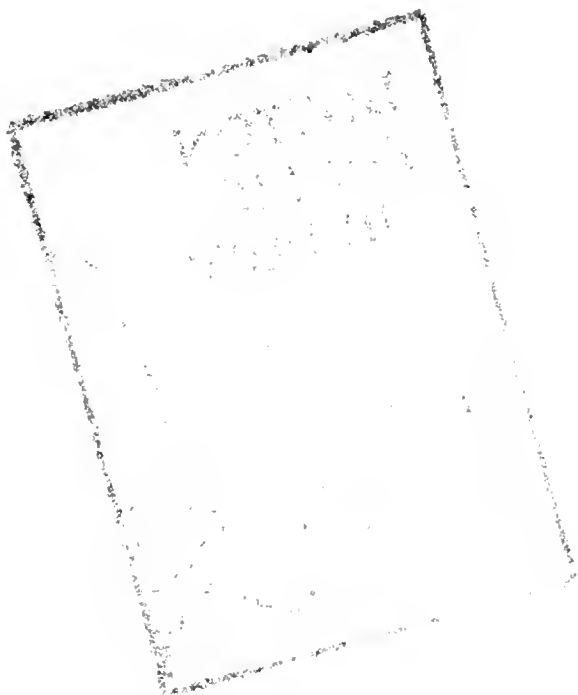
TO: DEVELOPMENT STAFF
FROM: NANCY TENTINDO/
DATE: AUGUST 15, 1988
SUBJECT: ARTICLE 31 SCOPING DETERMINATION

Attached for your reference is a copy of a Scoping Determination issued for the 45 Province Street project. Please note that a new format has been developed with respect to the first page of the Scope, and that several sections have been revised both in format and substantively.

cc: Bill Whitney



BOSTON REDEVELOPMENT AUTHORITY
Library



BOSTON
REDEVELOPMENT
AUTHORITY

Raymond L. Flynn
Mayor

Stephen Coyle
Director

One City Hall Square
Boston, MA 02201
(617) 722-4300

August 12, 1988

Mr. David Epstein
Senior Vice-President
The Abbey Group
575 Boylston Street
Boston, MA 02116

Dear Mr. Epstein:

Re: No. 45 Province Street

Enclosed is the Scoping Determination for the No. 45 Province Street project (the "Proposed Project") for which you recently submitted a Project Notification Form ("PNF") pursuant to Article 31 of the Boston Zoning Code (the "Code"). The Scoping Determination requests information required by the Boston Redevelopment Authority ("BRA") for its review of the Proposed Project in connection with the following:

- a) Development Review pursuant to Article 31 of the Code;
- b) Recommendations to the Board of Appeal with respect to the zoning relief required for the Proposed Project, pursuant to Articles 6, 7, and 27D of the Code; and
- c) Approval of a Development Impact Project Plan, pursuant to Article 26A of the Code, and the entering of agreements for the Development Impact Project Contribution and Jobs Contribution Grant, pursuant to Articles 26A and 26B of the Code.

Please note that on July 14, the Authority held a public hearing on the Midtown Cultural District Plan and accompanying zoning plan. While neither the Plan nor the zoning has been adopted into law, these documents can serve as excellent sources of the city's planning objectives for this area. Among the objectives of the Plan are to create a new center of culture, to upgrade and expand the area's open space network, to protect and expand the Downtown Crossing retail economy, to protect the more than 150 historic buildings, to improve the area's transportation system, and to protect the district's historic scale and character. We anticipate the adoption of the Plan and zoning in substantially similar form sometime this fall. Therefore, your Draft Project Impact Report should address how the Proposed Project meets the objectives of the Midtown Cultural District Plan and conforms with the proposed zoning implementing the Plan.

L17/EE

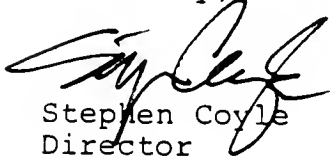
Mr. David Epstein
Page 2.

With respect to the proposed density, an FAR of 8 is the maximum FAR allowed for the Proposed Project under Article 27D of the Code because underlying zoning for the area in which the Proposed Project is located only allows an FAR of 8. However, as the draft permanent zoning for the Midtown Cultural District proposes a maximum allowable FAR of 10 for this site, we have requested studies of options at FARs of both 8 and 10 for some components.

In addition, the Scoping Determination includes requests for certain information for development of the site for the Proposed Project without discontinuance of the public access easement, as currently contemplated. This comparative information will assist the BRA in conducting its evaluation of the Proposed Project as described above. In addition, it is recommended that the Draft Project Impact Report for the Proposed Project specifically address the respective criteria provided in the Code that must be satisfied in connection with the various types of zoning relief required for the Proposed Project.

Additional information may be required during the course of BRA review of the Proposed Project. If you have any questions concerning the Scoping Determination or otherwise in connection with the review of the Proposed Project, please contact William D. Whitney, Assistant Director for Urban Design and Development at 722-4300, ext. 302.

Sincerely,



Stephen Coyle
Director

Enclosure

BOSTON REDEVELOPMENT AUTHORITY

SCOPING DETERMINATION
45 PROVINCE STREET

SUBMISSION REQUIREMENTS
FOR DRAFT PROJECT IMPACT REPORT (DPIR)

PROJECT NAME: 45 Province Street

PROJECT LOCATION: 5-47 Province Street

DEVELOPER: The Abbey Group

PNF SUBMISSION DATE: June 10, 1988

This Scoping Determination is issued pursuant to Section 31-5 of the Boston Zoning Code. The Applicant filed a Project Notification Form ("PNF") on June 10, 1988.

The proposed project includes the demolition of the existing Province Street Parking Garage and the construction of a new office/retail building with below-grade parking. The PNF proposes a new 12-story stone and brick building with a six-level, below-grade parking facility under the building and extending under both Chapman and Province Streets. The characteristics of the proposed project include:

Total SF:	138,810
Office SF:	126,500
Retail SF:	12,310
Parking Spaces:	402±
Proposed Height:	155 feet
Proposed FAR:	10
Proposed Start of Construction:	3rd quarter, 1989
Proposed Completion:	2nd quarter, 1991

Article 27D of the Boston Zoning Code, the Downtown Interim Planning Overlay District, places the proposed project in a Medium Growth Subdistrict. The project is subject to Boston Redevelopment Authority review and approval pursuant to Article 31 of the Boston Zoning Code. The Draft Project Impact Report must conform to Article 31 and to this Scoping Determination.

In addition to full-size scale drawings, 20 copies of a bound booklet containing all submission materials reduced to size 8½ x 11, except where otherwise specified, are required.

In this Scoping Determination, alternative development options are requested for various components. For ease of reference, these options are denoted as follows:

- Option A: The project as proposed in the PNF of 155 feet/FAR 10 and assuming street discontinuances are granted which would allow a parking garage of approximately 402 spaces;
- Option B: A project of 155 feet/FAR 10 which assumes that no street discontinuances are granted and that therefore all below-grade parking structure must be built without such discontinuances; and
- Option C: A project at an as-of-right height of 125 feet and an as-of-right FAR of 8 assuming discontinuances are granted.

Please refer to each component to determine which options need be analyzed.

I. GENERAL INFORMATION

1. Applicant Information

A. Development Team

1. Names

- a. Developer (including description of development entity)
- b. Attorney
- c. Project consultants

2. Business address and telephone number for each

3. Designated contact for each

4. Description of current or formerly-owned developments in Boston

B. Legal Information

1. Legal judgments or actions pending concerning the proposed project
2. History of tax arrears on property owned in Boston by development team
3. Evidence of site control over the project area, including current ownership and purchase options of all parcels in the proposed project, all restrictive covenants and contractual restrictions affecting the proponent's right or ability to accomplish the proposed project and the nature of the agreements for securing parcels not owned by the prospective developer.

2. Financial Information

(See Appendix 1 for required financial information)

Development and Operating Pro Formas should be provided both for Option A and Option B.

- A. Full disclosure of names and addresses of all financially involved participants and bank references
- B. Development Pro Forma
- C. Ten Year Operating Pro Forma

3. Project Area

- A. Description of metes and bounds of project area

4. Public Benefits

- A. Development Impact Project Contribution and Jobs Contribution Grant specifying amount of housing linkage and jobs linkage contributions and method of housing linkage contribution (housing payment or housing creation)
- B. Increase in tax revenues, specifying existing and estimated future annual property taxes
- C. Anticipated employment levels including the following:
 1. Estimated number of construction jobs
 2. Estimated number of permanent jobs

- D. Submission of Boston Residents Construction Plan in accordance with the Boston Residents Jobs Policy requiring that 50, 25, and 10 percent of person-hours in construction jobs on publicly-assisted and large-scale private commercial projects be worked by Boston residents, minorities and women, made effective as of July 12, 1985 by Executive Order, to Development Impact Projects
 - E. Submission of voluntary Employment Opportunity Plan presenting good-faith efforts to achieve the goal that the profile of permanent employees in the building be 50 percent Boston residents
5. Regulatory Controls and Permits
- A. Existing zoning requirements, zoning computation forms, and any anticipated requests for zoning relief
 - B. Anticipated permits required from other local, state, and federal entities with a proposed application schedule
 - C. If the Proposed Project is subject to the Massachusetts Environmental Policy Act (MEPA), required documentation including copies of the Environmental Notification Form and a proposed schedule for coordination with Article 31 procedures
7. Community Groups
- A. Names and addresses of project area owners, displacees, abutters, and also any community groups which, in the opinion of the applicant, may be substantially interested in or affected by the proposed project
 - B. A list of meetings proposed and held with interested parties

II. TRANSPORTATION COMPONENT

The following requirements incorporate comments by the Boston Transportation Department regarding transportation issues and objectives for 45 Province Street. The Boston Transportation Department comments on the Scope of Services prepared by the firm Vanasse Hangen Brustlin, Inc. are provided in Appendix 2 and offer specific requirements as to the methods of analyzing transportation impacts and options for the proposed project.

The following must be submitted for Options A and B:

- 1. Parking
 - A. Existing parking conditions in the study area

1. Parking characteristics in proximity to the site
 2. The supply of parking, both on-and off-street
 - B. Number of spaces provided indicating public and private allocation
 - C. Proposed Project's impact on demand for parking
 - D. Parking plan, including layout, access, size of spaces, the level of utilization of spaces by different user types, and the degree to which joint use of spaces can result in lower parking space demand
 - E. Evidence of compliance with City of Boston parking freeze requirements
2. Loading
 - A. Number of docks
 - B. Location and dimension of docks
3. Access
 - A. Size and maneuvering space on-site or in public right-of-way; and the internal maneuvering space for trucks of all sizes, especially with regard to the disruption of on-street traffic flow by trucks backing in or out
 - B. Access, curb cuts, and/or sidewalk changes required
 - C. Analyses of access to loading docks under a variety of access scenarios
4. Vehicular Traffic
 - A. Projection of vehicular traffic demand and generation (daily and peak-hours) and directional distribution
 - B. Circulation and access impacts on the local and regional street system and local intersections (traffic impact area), including capacity and level-of-service analyses
 - C. Analyses of the existing conditions and the impact of the proposed project at the following intersections:
 - o Park/Tremont
 - o Tremont/Bromfield
 - o Tremont/School
 - o School/Province
 - o Province/Bromfield
 - o School/Washington

- D. Analysis of proposed project impact on Province Street that reflects such phenomena as back-up from one intersection blocking the previous one, pedestrian conflicts, and servicing and loading at adjacent buildings
- E. Modal split and vehicle occupancy analysis
- F. Estimated taxi trips to the site
- G. Estimated truck and service vehicle traffic to the site

5. Public Transportation

- A. Location and availability of public transportation facilities
- B. Usage, capacity, and planned improvements to the existing system
- C. Peak-hour demand and capacity analysis

6. Pedestrian Circulation

- A. Pedestrian conditions in the study area, including identification of pedestrian activity, circulation deficiencies and barriers, and measures to improve such conditions
- B. Demand and capacity analysis on project area sidewalks including Province Street, Bromfield Street, and School Street, with particular attention to impacts on Bosworth Street, and on project area intersections including Tremont/School, School/Washington, and Province/School

- C. Identification of pedestrian corridors in the immediate vicinity of the project including possible flow corridors to Downtown Crossing, Boston Common, and Government Center, and including indoor and outdoor connections open to public crossing.
- D. Connections to public transportation station stops
- E. Effect on pedestrian flows of project parking and service entrances and exits

7. Access Plan

- A. Measures to manage and reduce parking demand and optimize use of available parking spaces, including:
 - o Proposed rate structure(s)
 - o Ride-sharing incentives and information dissemination
 - o Set-asides for high-occupancy vehicles (specify number and location)
 - o Set-asides for after-morning commuter peak (usually 9:30 or 10:00 am; specify number)
- B. Measures to encourage public transportation use and mitigate project impact on public transit including:
 - o Mass transit information dissemination
 - o MBTA pass sales and subsidies
- C. Measures to reduce peaking, including:
 - o Travel demand modifications
 - o Roadway/traffic operation improvements
 - o Encouragement of flexible work hours
 - o Restrictions on service and goods deliveries
- D. Measures to mitigate project impacts on pedestrian traffic including:
 - o improvements to the pedestrian environment
- E. Measures to mitigate construction impacts, including:
 - o time and routes of truck movements and materials deliveries
 - o worker parking and commuting plan
 - o location of construction staging areas
 - o measures to protect the public safety
 - o measures to ensure vehicular and pedestrian access onto and through Province Street
 - o storage of materials and equipment

A Construction Management Plan must be submitted to the Boston Transportation Department.

F. Monitoring Program

A long-term program to monitor the travel behavior of project tenants and other users of the site should be submitted. Information should include travel mode, vehicle occupancy rate, and employee origin-destination surveys

III. ENVIRONMENTAL PROTECTION COMPONENT

Analysis of wind impacts must be done for Option A and Option C.

1. Wind

A qualitative analysis of the potential wind impacts of the proposed building at the pedestrian level is required for the Draft Project Impact Report. This analysis must determine potential pedestrian level winds adjacent to and in the vicinity of the project site and shall identify any areas where wind velocities are expected to exceed acceptable levels, including the Authority's guideline of an effective gust velocity of 31 mph not to be exceeded more than 1% of the time.

Particular attention must be given to public and other areas of pedestrian use, including, but not limited to, project entrances, the Province Street sidewalks, and Bosworth Place.

For areas where wind speeds are projected to exceed acceptable levels, measures to reduce wind speeds and to mitigate potential adverse impacts must be identified.

Should the qualitative analysis indicate the possibility of excessive pedestrian level wind speeds, additional studies, including wind tunnel testing, may be required for the Final Project Impact Report.

2. Shadow

Shadow analyses must be performed for Option A and Option C.

A shadow analysis must be performed for existing and build conditions for the hours 9:00 a.m., 12:00 noon, and 3:00 p.m. for the vernal equinox, summer solstice, autumnal equinox, and winter solstice. It should be noted that due to time differences (daylight savings vs. standard), the autumnal equinox shadows would not be the same as the vernal equinox shadows and therefore separate shadow studies are required for the vernal and autumnal equinoxes.

The shadow impact analysis must include net new shadow, as well as existing shadow and must clearly show the incremental impact of the proposed building. Shadows produced by adjacent existing buildings also must be included.

Particular attention must be given to existing or proposed public open spaces and major pedestrian areas, including, but not limited to, Bosworth Street and the sidewalks along Province Street.

Design or other mitigation measures to limit or minimize any adverse shadow impact must be identified.

3. Air Quality

An air quality analysis must be performed for Option A and Option B.

A description of the garage exhaust system, including location and specifications, and an analysis of the impact on pedestrian level air quality from operation of the exhaust system must be performed. Measures to avoid any violation of air quality standards shall be described. The impact on the adjacent Parker House hotel must be evaluated.

4. Geotechnical Impact

Geotechnical impacts must be assessed for Option A.

An analysis of existing sub-soil conditions, groundwater levels, potential for ground movement and settlement during excavation, and potential impact on adjacent buildings and utility lines must be performed. This analysis must include a description of the foundation construction methodology, the amount and method of excavation, and measures to prevent any adverse effects on adjacent buildings and utility lines.

The project may include up to six levels of underground parking, in which case excavation below the existing water table may be required. Therefore, an analysis is required of the impact of foundation construction on the maintenance of groundwater levels and on foundation supports of adjacent structures. Measures to ensure that groundwater levels will not be lowered during or after construction must be described.

5. Noise

A noise analysis must be performed for Option A.

A description of any exterior building mechanical systems, including location and specifications, and an analysis of the noise produced and impact on the adjacent Parker House hotel must be performed. Measures to minimize noise and to avoid any violation of applicable City regulations must be described.

6. Construction Impacts

A construction impact analysis must be performed for both Option A and Option B. The construction impact analyses must include a description and evaluation of the following:

- A. construction schedule, including hours of construction activity
- B. potential dust and pollutant emissions and mitigation measures to control these emissions
- C. potential noise impact and mitigation measures to minimize increase in noise levels
- D. The mode of arrival for construction worker trips
- E. Frequency, times and routes of truck movements and construction activities
- F. Temporary storage of construction equipment and materials.
- G. Need for full or partial street closures or street occupancy during construction

7. Rodent Control

A rodent control analysis must be performed for Option A.

An analysis of the impact of project construction on rodent populations and a description of the proposed rodent control program and compliance with applicable City and State regulatory requirements must be performed.

IV. URBAN DESIGN COMPONENT

Urban Design materials must be submitted for Option A at this time. The submittal of such materials for Options B and C may be required for the Final Project Impact Project.

The following urban design objectives for the Midtown Cultural District must be addressed in the analysis required in the Draft Project Impact Report. See Section 27D-18 of the Boston Zoning Code.

- o Pedestrian ways shall be created from existing minor streets, lanes and alleys and new-through block connections. In this regard, the office lobby should provide a through-block connection between Province Street and Chapman Place.
- o Cornice lines shall be consistent with the additional range of building heights in the surrounding area.
- o Public open space and streetscape improvements shall encourage the showcasing of cultural activities.

- o Storefronts along pedestrianways shall be visually permeable.
- o Facades, storefronts, and entryways shall be modulated, articulated, and scaled for use by pedestrians.

In addition, the following urban design objectives should also be addressed in the Draft Project Impact Report.

- o Massing: Building mass must conform with adjacent buildings that are typical of the district; set-backs must relate to other buildings on Province Street
- o Character: Materials and details of the project must be compatible with and reinforce the character of Province Street
- o Fabric: The project must reinforce the street and block pattern of the district, with street walls at the lot line
- o Historic Preservation: The historic Province Street Steps must be restored

In order to determine that the proposed project is (a) architecturally compatible with surrounding structures; (b) exhibits an architectural concept that enhances the urban design features of the subdistrict in which it is located; (c) augments the quality of the pedestrian environment; and (d) is consistent with established design guidelines that exist for the area, and therefore meets the requirements for enhanced building height, the following items must be submitted:

1. Written description of program elements and space allocation for each element
2. Plan for the surrounding area and district and sections at an appropriate scale (1" = 50' or larger) showing relationships of the proposed project to the surrounding area and district:
 - A. massing
 - B. building height
 - C. scaling elements
 - D. open space
 - E. major topographic features
 - F. pedestrian and vehicular circulation
 - G. land use
3. Black and white 8"x10" photographs of the site and neighborhood
4. Sketches and diagrams to clarify design issues and massing options

5. Eye-level perspective (reproducible line drawings) showing the proposal in the context of the surrounding area
6. Aerial views of the project
7. Site sections at 1" = 20' or larger showing relationships to adjacent buildings and spaces
8. Site plan at an appropriate scale (1" = 20' or larger) showing:
 - A. General relationships of proposed and existing adjacent buildings and open space
 - B. Open spaces defined by buildings on adjacent parcels and across streets
 - C. General location of pedestrian ways, driveways, parking, service areas, streets, and major landscape features
 - D. Pedestrian, handicapped, vehicular and service access and flow through the parcel and to adjacent areas
 - E. Survey information, such as existing elevations, benchmarks, and utilities
 - F. Phasing possibilities
 - G. Construction limits
9. Massing model at 1" = 40' for use in the Authority's downtown base model and a study model at 1" = 16' showing facade design.
10. Drawings at an appropriate scale (e.g., 1" = 8') describing architectural massing, facade design and proposed materials including:
 - A. Building and site improvement plans
 - B. Elevations in the context of the surrounding area
 - C. Sections showing organization of functions and spaces
 - D. Preliminary building plans showing ground floor and typical upper floor(s)
11. Proposed schedule for submittal of design development materials

Submission materials for Design Development and Contract Documents submissions can be found in Appendix 3.

V. HISTORIC RESOURCES COMPONENT

A historic resources analysis must be performed for Option A.

1. Description of the project site with relation to the Wesleyan Association Building (a Massachusetts Register site) the proposed Ladder Blocks Historic District, 20-30 Bromfield Street, (designated a landmark by the Boston Landmarks Commission), Tremont Temple, the New Studio and Phillips buildings at 110 and 120 Tremont Street, and the Hutchinson Building (structures which have been petitioned for landmark status), and possible effects on such sites, districts, or landmarks
2. Impact of the Proposed Project on the Boston Five Cents Savings Bank, the Waterman Building, Old City Hall, and the Parker House Hotel (buildings rated I, II, or III by the Boston Landmarks Commission in proximity to the site)
3. A study of the history of the Province Street Steps must be submitted. A plan for archaeological investigation of the surrounding area should be done should the historical study indicate that the area has archaeological potential relative to the Province House site and grounds. The study will also help to guide the approach to restoration of the steps, as questions have been raised about the original symmetry of the steps.

VI. INFRASTRUCTURE SYSTEMS COMPONENT

An infrastructure impact analysis must be performed for all options.

The Applicant must submit a description of the Proposed Project's anticipated water and electricity consumption, sewage generation, and energy requirements.* In addition, the Applicant's submission must include an evaluation of the Proposed Project's impact on the capacity and adequacy of existing water, sewage, energy and electrical (telephone, cable, etc.) utility systems and the need reasonably attributable to the Proposed Project for additional systems facilities.

Any system upgrading or connection requiring a significant disruption in vehicular or pedestrian circulation, or affecting any public or neighborhood park or streetscape improvements, is an impact which must be mitigated. In particular, because of the extensive impacts on utility relocation within all three bounding streets, it is critical that these impacts be accurately assessed. A plan must be provided which identifies the specific user areas affected, the proposed relocation configuration and phasing, anticipated impacts, and mitigation measures, if necessary. Measures to conserve resources, such as recycling, must be identified.

The Applicant must conduct a thorough consultation with representatives of all utilities and should reference all such consultations in the infrastructure impact analysis. The proponent must also have one or more additional meetings with the Transportation Liaison Committee.

In addition, a description of the impacts of the project on the quality of Boston Harbor or other water bodies must be provided if applicable, and mitigation measures to reduce or eliminate such impacts should be provided if necessary.

- * Note: Energy requirements include electricity, gas, steam and other utilities, but are not meant to include thermal transfer values or insulation efficiency, except as a possible mitigating measure.

APPENDICES

Appendix 1

REQUIRED FINANCIAL INFORMATION

REQUIRED FINANCIAL INFORMATION -- 45 PROVINCE STREET

DEVELOPMENT PRO FORMA includes all the information normally found in a development proforma, by phase. This includes, but is not limited to:

Land costs, per land square foot and total, by parcel, including any incremental disposition cost attributed to the project.

Attribution of acquisition expense over project components (per FAR square foot residential, office, parking, etc.).

All hard costs on a per-unit and total basis, by phase (disaggregated into base building, tenant improvement work, rehabilitation work, garage cost, site work, furniture, fixtures and equipment, etc.).

All soft costs on a per-unit and total basis, by phase (disaggregated into individual line items such as architectural, engineering, legal, accounting and developer's fees and any other professional fees, insurance, permits, real estate tax during construction, etc.).

All contingencies, by phase (specify whether contingency is on hard cost, soft cost, or total cost).

All assumptions regarding financing terms on predevelopment, and construction loans, by phase (including financing fees, interest rates, terms, drawdown assumptions, terms, participations, amortization).

Calculation of housing and jobs linkage obligation, and anticipated payment method (over term of obligation or on a net present value basis).

Any other project-related expenses not within any of the above categories.

Calculation of total development cost by component, including total and per unit breakdown (e.g. per square foot office, retail, etc., per parking space, etc.).

Sources of debt and equity for total project costs.

Appropriate return measures (return on equity, return on total development cost, internal rate of return; specify method of calculation and hurdle rates).

10-YEAR OPERATING PRO FORMA includes all the information normally found in an operating pro forma, on a yearly basis. This includes, but is not limited to:

Tabulation of gross and net (leasable) square feet for all commercial space.

Schedule of all rents on a per square foot and total basis (including anticipated garage rates and occupancy).

Anticipated operating expenses and real estate taxes on per square foot and total basis, and clear explanation of division of expenses between owner and tenant (includes all commercial space, hotel, and garage).

All other expense and vacancy assumptions set forth to calculate cash available for debt service.

Anticipated leasing patterns (5-yr, 10-yr, etc.), lease-up rates and calculation of operating deficits, if any.

Tenant inducements including free rent, tenant improvement allowances, etc.

Calculation of debt service, before tax cash flow, debt coverage ratios.

Appendix 2

TRANSPORTATION SCOPE OF SERVICES
AND AMENDMENTS BY THE BOSTON TRANSPORTATION DEPARTMENT



SCOPE OF SERVICES
FOR THE PREPARATION OF A
TRANSPORTATION ACCESS PLAN
45 PROVINCE STREET DEVELOPMENT
BOSTON, MASSACHUSETTS

SCOPE OF SERVICES

A. DESCRIPTION OF SERVICES

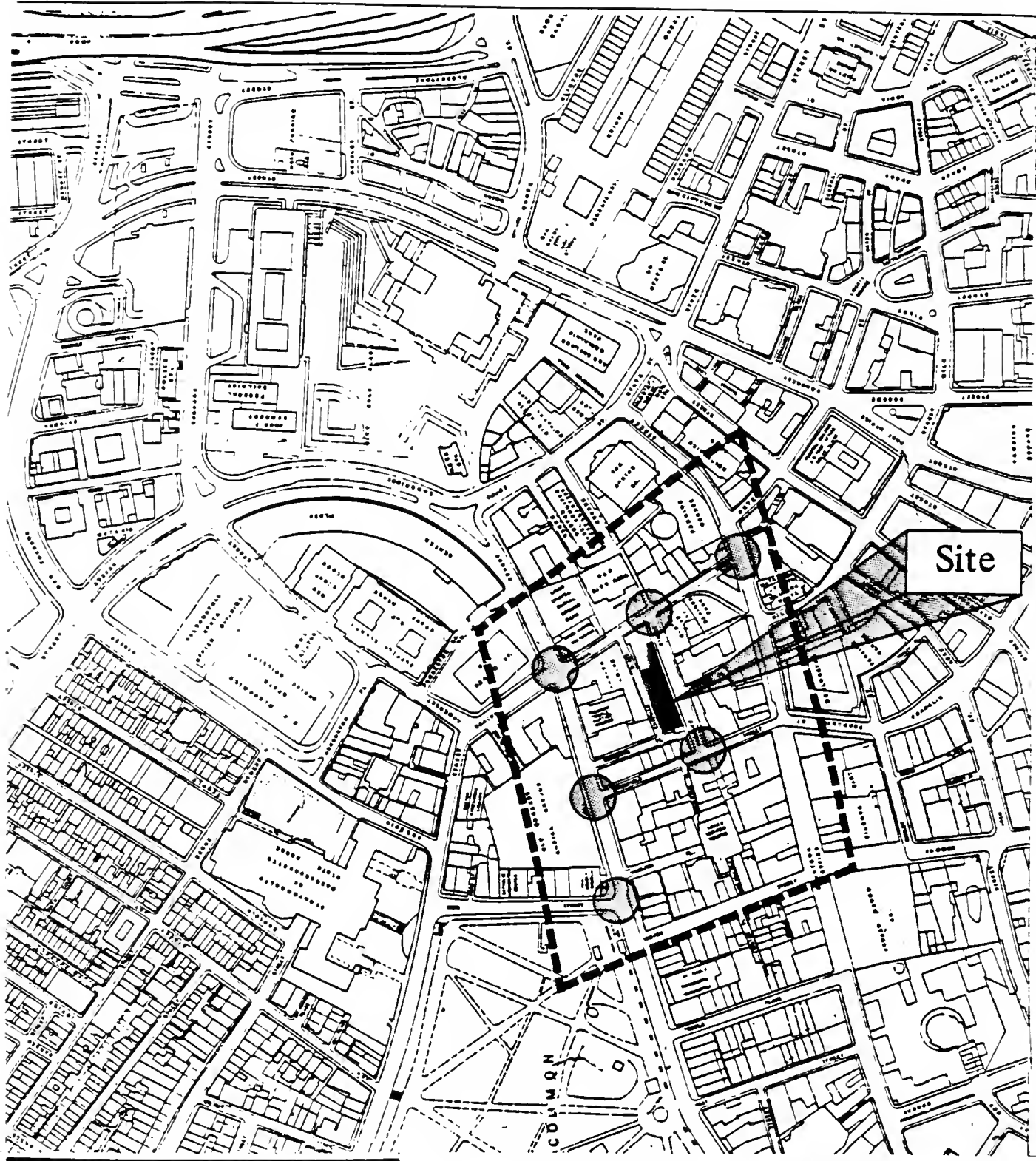
Vanasse Hangen Brustlin, Inc. will perform the necessary transportation planning and engineering tasks involved in the preparation of a Transportation Access Plan for the proposed 45 Province Street Development including the following:

- o A definition of existing traffic, parking, pedestrian, and transit conditions in the study area;
- o An evaluation of the project's short-term traffic impacts related to construction activity;
- o An evaluation of long-term impacts on traffic, parking, public transportation, and pedestrians;
- o Consideration of loading and service vehicles;
- o Identification of appropriate measures to mitigate project impacts; and
- o A monitoring program of long-term travel behavior.

Any previous or ongoing transportation studies conducted in the area will be incorporated. Other significant projects which will be completed by the 1991 project completion time frame and which will exert an influence on areawide travel demands will be considered in the study.

B. STUDY AREA

The study will be limited to the area shown in Figure 1. The specific intersection locations to be analyzed are also indicated in Figure 1.



Vanasse Hangen Brustlin, Inc.
 Consulting Engineers & Planners
 60 Birmingham Parkway, Boston, MA 02135

0 200 400
 SCALE IN FEET

Proposed
 Study Area

LEGEND:

--- Study Area
 ○ Analysis Locations

Fig.1



C. DEFINITION OF TASKS

Task 1 - Data Inventory/Baseline Transportation Conditions

Vanasse Hangen Brustlin, Inc. will compile data on supply and usage characteristics of the various transportation systems within the study area.

- 1.1 Traffic. New traffic data to be collected as part of this effort will be limited to those intersections where counting is necessary to expand upon available data. Based on data gathered from all sources, a preliminary base traffic volume network will be developed to represent existing conditions.
- 1.2 Parking. Parking characteristics in proximity to the site will be defined. Of particular interest will be an identification of the supply of parking, both on- and off-street in the study area.
- 1.3 Transit. Data will be gathered on public transportation usage levels and improvement plans for commuter rail, rapid transit and local/express bus services identified. Other baseline transportation data will be derived from previously compiled information and reports.
- 1.4 Pedestrian. Identification of pedestrian activity and circulation deficiencies will be undertaken at all analysis locations. In addition, pedestrian counts will be taken on sidewalks immediately adjacent to the project block, including Province Street, Bromfield Street, and School Street. Pedestrian counts will also be taken at the intersections of Tremont/School and School/Washington.

Task 2 - Evaluation of Long-Term Transportation Impacts

Expected long-term transportation impacts in the study area will be estimated and evaluated.

- 2.1 Trip Generation. The development program will be analyzed to estimate potential peak period and daily impacts of the project on traffic, parking and public transportation. The estimate of potential impacts will be based on net additional development of the site beyond any impacts associated with existing development activity on the site.
- 2.2 Conditions to be Analyzed. The following scenarios will be analyzed for 1991 using the existing street system:

- o No-Build (without the proposed project, but with potential impacts related to background projects anticipated to be completed by 1991).
- o Full Build (No-build scenario with addition of potential impacts related to the proposed project).

2.3 Background Development and Transportation Projects. Building construction projects to be included in the No-Build evaluation will be defined and reviewed with BRA and BTD staff prior to the analysis. Specific background projects expected to be considered at full occupancy include 64-74 Franklin Street, 15 New Chardon Street, 73 Tremont Street, 110-120 Tremont Street, the Temple project on Tremont Street, the Parkside project on Tremont Street, 20 and 21 Custom House Street, 75 State Street, 125 Summer Street, 99 Summer Street, 101 Arch Street, 125 High Street, 150 Federal Street, 101 Federal Street, International Place, and Rows Wharf.

2.4 Evaluation of Transportation Impacts. New trips expected to be created by the proposed development will be added to demands currently carried by the existing transportation infrastructure. AM and PM peak hour and daily increases will be developed and analyzed for all travel modes, as described below:

1. Traffic Impacts - Volume/capacity ratio (V/C), Delay, Available Reserve Capacity (ARC), and Level of Service (LOS) calculations at key study area intersections.
2. Parking Impacts - Increased parking demand will be compared with existing and projected available supply to identify deficiencies. The analysis will discuss long-term vs. short-term parking needs.
3. Public Transportation - New ridership generated by the project and its potential impacts on the MBTA's rapid transit, commuter rail, and express bus services will be identified.
4. Pedestrian Impacts - An evaluation of pedestrian conditions on sidewalks and intersections adjacent to the site will be conducted. Sidewalk capacity analyses will include estimates of future No-build and Build pedestrian volumes on adjacent sidewalk sections, including Province Street, Bromfield Street, and School Street. These analyses will follow procedures given in the 1985 Highway Capacity Manual. Intersection capacity analyses will include specific pedestrian count data at



Tremont/School and School/Washington and pedestrian observations at other analysis intersections. Finally, a qualitative evaluation of major pedestrian activity in the immediate vicinity of the project will be made. This will include possible flow corridors to Downtown Crossing, Boston Common, and Government Center.

5. Loading/Service/On-site Circulation - Truck and service vehicle traffic to the site will be estimated.
6. Taxi - Taxi trips to the site will be estimated.

Task 3 - Evaluation of Short-Term Impacts (construction period). The transportation assessment will evaluate the impacts of the project during the construction period, including the following:

1. Mode of arrival for construction worker trips.
2. Parking provisions for construction workers and construction materials deliveries.
3. Frequency, times and routes of truck movements and construction activities.
4. Temporary storage of construction equipment and materials.
5. Need for full or partial street closures or street occupancy during construction.

Task 4 - Mitigation Measures/Access Plan Development. Measures will be identified to lessen any impacts of the proposed project on the transportation infrastructure. The resultant effect of these measures will be determined either through application of analysis techniques identified under Tasks 2 and 3 or through appropriate qualitative review.

Depending on the extent of transportation deficiencies caused by the project, mitigation measures to be included in the Access Plan component of the study may include as appropriate:

- Travel demand modifications;
- Roadway/traffic operation improvements;
- Improvements to the pedestrian environment;
- Construction management plan.



Task 5 - Long-Term Monitoring (following completion of the project). A long-term program to monitor the travel behavior of project residents, tenants and other users of the site upon project completion, will be developed. The program will outline the procedure to be used to collect the following information:

- Travel mode
- Vehicle occupancy rate
- Employee origin-destination surveys

Task 6 - Report Preparation. The results of the above effort will be incorporated into a document entitled "Transportation Access Plan" which will describe the work performed during the study and document the study process, procedures, and findings for use by the BRA and the Boston Transportation Department.



BOSTON
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AMENDMENTS
to
SCOPE OF ACCESS PLAN
as submitted by Vanasse Hangen
on May 19, 1988

- 1.4 Pedestrian. After "Tremont/School" add: ", Province/School,".
- 2.2 Conditions to be Analyzed. Add:
 - o Alternative Build (Same as full-build scenario, with exception of being built entirely within existing property line).
- 2.4 Pedestrian Impacts. Add:
...with particular attention to impacts on Bosworth St.

BTD 6/27/88

7224T

RAYMOND L. FLYNN, MAYOR
RICHARD A. DIMINO, COMMISSIONER

Appendix 3

SUBMISSION REQUIREMENTS FOR DESIGN DEVELOPMENT
AND CONTRACT DOCUMENTS SUBMISSIONS

Phase II Submission: Design Development

1. Revised written description of project
2. Revised site sections
3. Revised site plan showing:
 - a. Relationship of the proposed building and open space to existing adjacent buildings, open spaces, streets, and buildings and open spaces across streets
 - b. Proposed site improvements and amenities including paving, landscaping, lighting and street furniture
 - c. Building and site dimensions, including setbacks and other dimensions subject to zoning requirements
 - d. Any site improvements or areas proposed to be developed by some other party (including identification of responsible party)
 - e. Proposed site grading, including typical existing and proposed grades at parcel lines
4. Dimensioned drawings at an appropriate scale (e.g., 1" = 8') developed from approved schematic design drawings which reflect the impact of proposed structural and mechanical systems on the appearance of exterior facades, interior public spaces, and roofscape including:
 - a. Building plans
 - b. Preliminary structural drawings
 - c. Preliminary mechanical drawings
 - d. Sections
 - e. Elevations showing the project in the context of the surrounding area as required by the Authority to illustrate relationships or character, scale and materials
5. Large-scale (e.g., 3/4" = 1'-0") typical exterior wall sections, elevations and details sufficient to describe specific architectural components and methods of their assembly
6. Outline specifications of all materials for site improvements, exterior facades, roofscape, and interior public spaces
7. Eye-level perspective drawings showing the project in the context of the surrounding area

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